

(No Model.)

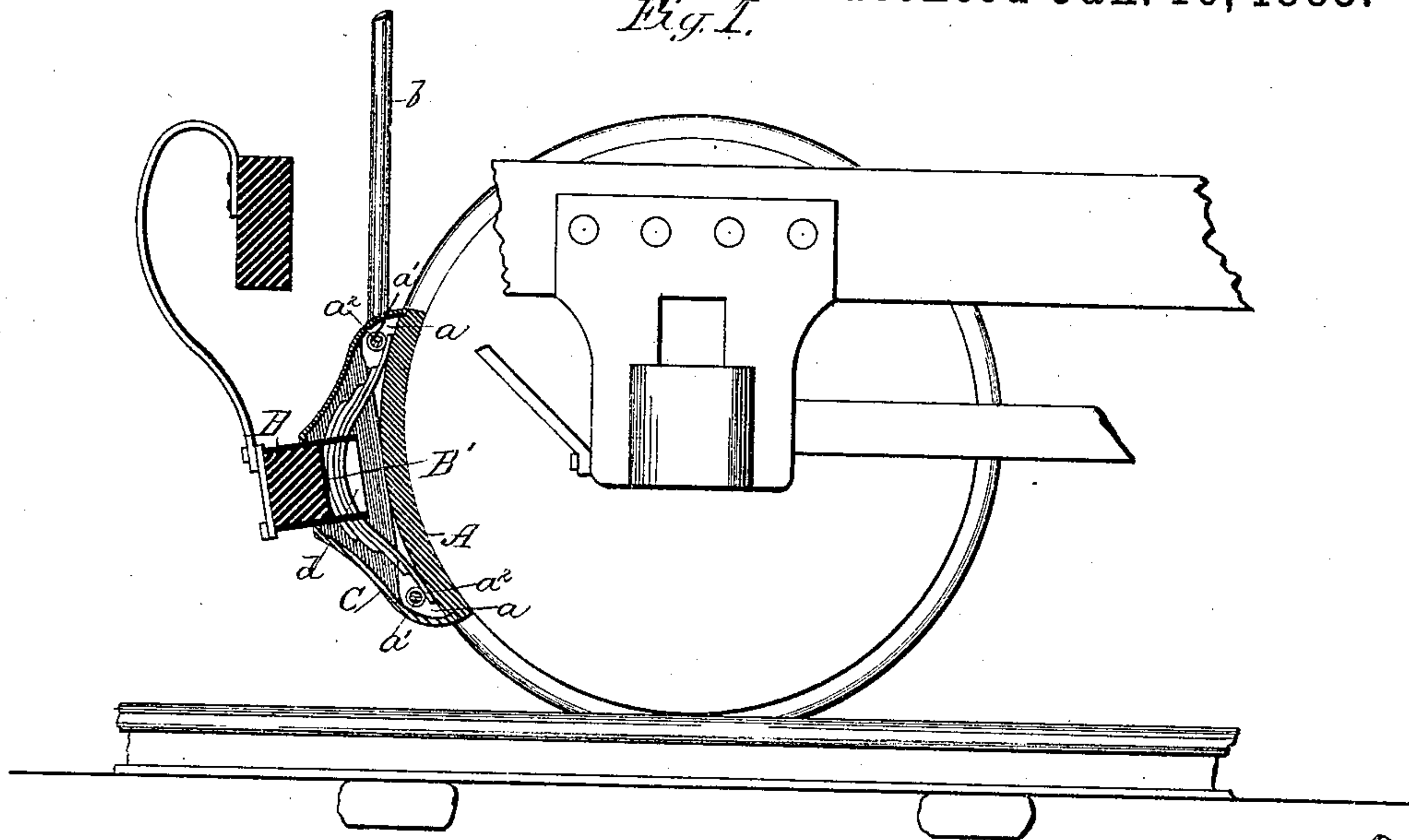
E. R. BRISTOL.

CAR BRAKE.

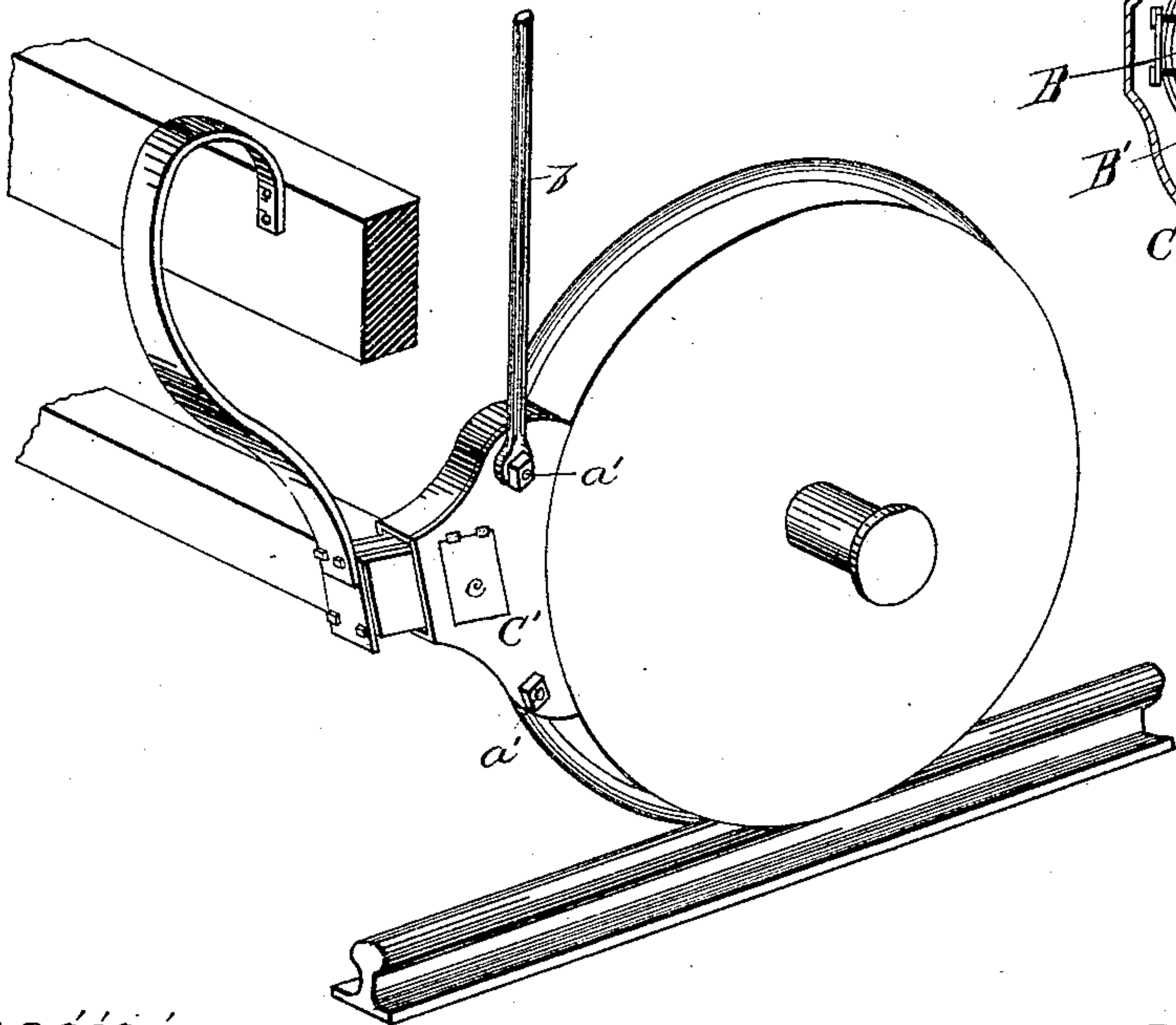
No. 270,732.

Patented Jan. 16, 1883.

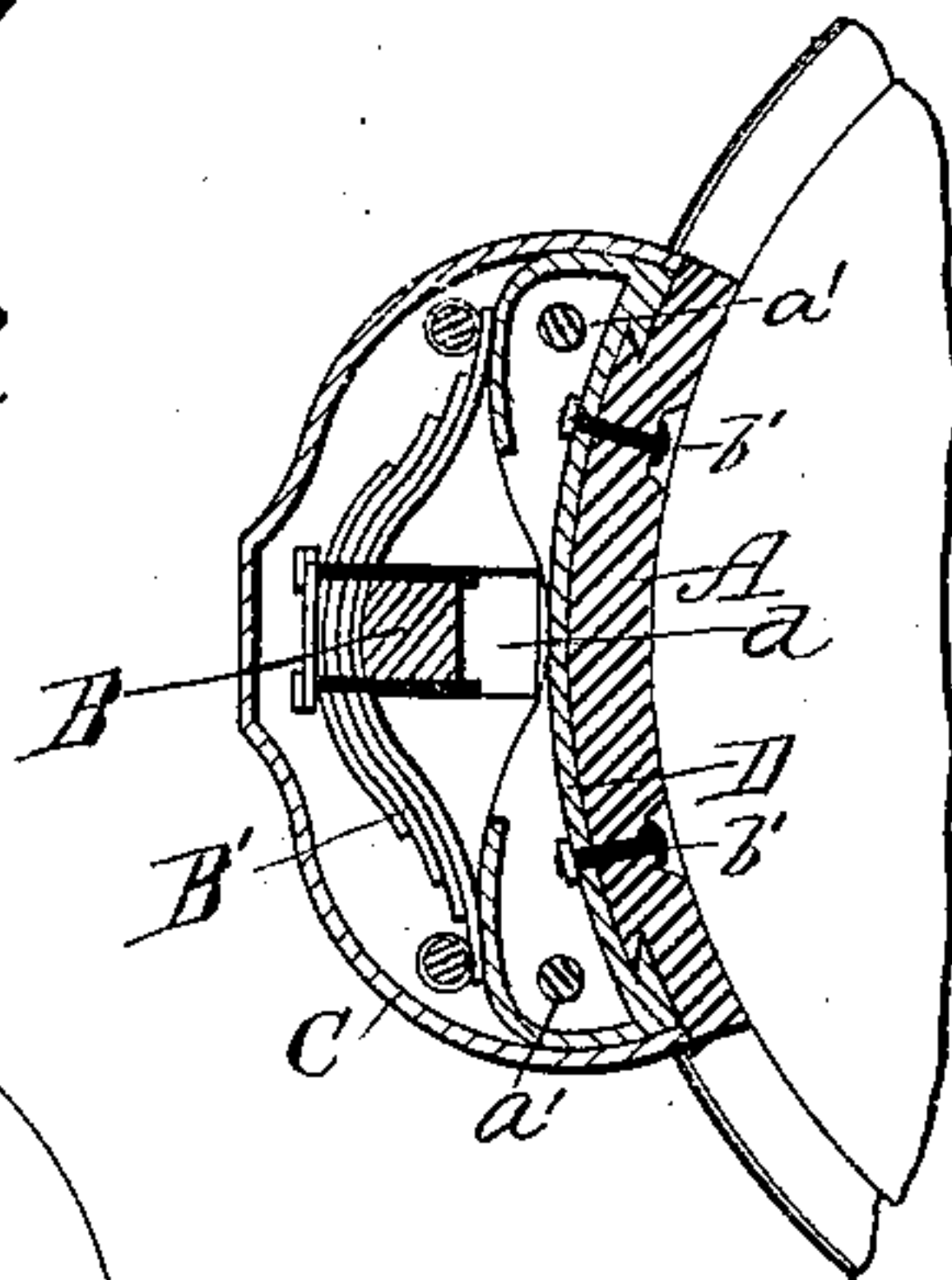
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
C. B. Story  
Adolph Klein.

Inventor:  
Edmund R. Bristol  
By  
Stout & Underwood  
Attorneys.

# UNITED STATES PATENT OFFICE.

EDMUND R. BRISTOL, OF MADISON, WISCONSIN.

## CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 270,732, dated January 16, 1883.

Application filed November 25, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND R. BRISTOL, of Madison, in the county of Dane, and in the State of Wisconsin, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to the braking of cars; and it consists in devices which will be fully described hereinafter.

In the drawings, Figure 1 is a vertical section through one end of the brake-beam and through my improved shoe. Fig. 2 is a perspective view of my device. Fig. 3 is a section of a modification.

A is the brake-shoe. B is the brake-beam. B' is a spring for transmitting the power from the beam to the shoe, and C is a box inclosing the spring. The shoe A is connected with the box by ears *a* and bolts *a'*, and these same bolts serve to secure the lid C' upon the box C, and the upper bolt, *a'*, takes the lower end of rod *b*, by which the box is suspended. The spring B' is generally clipped to the beam B, as shown in Fig. 1, and its ends project forward against the shoe and beneath the bolts *a'*, which latter may be provided with sleeves or rollers *a''*, that, while they hold the ends of the spring tight up against the shoe, permit them to play up and down freely as the spring is compressed and relieved.

In the modification, Fig. 3, I clip the spring B' to the rear edge of the brake-beam and attach the brake-shoe to a backing, D, by a dove-tail tongue and groove and by countersunk

bolts *b'*. The backing D consists of a shell the rear walls of which receive the ends of the spring B', and are cut out to permit the brake beam and shoe to approach each other as the power is applied to brake the wheels, and also to permit of the insertion of a wrench, by which the nuts on the bolts *b'*, that hold the shoe in place, may be tightened. The sides of the backing perform the same office in the modification shown in Fig. 3 as the ears *a* perform in the device shown in Figs. 1 and 2—that is, they serve to receive the bolts that connect the shoe with the box. In both instances the box is slotted, as at *d*, to take the end of the brake-beam; and I may provide the lid of the box with a small inspection-door, *c*, and I may also bolt a plate to each end of the brake-beam, that, projecting along the face of the box, will keep the slot *d* closed.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of box C, brake-beam, brake-shoe, and interposed spring B', as set forth.

2. The box, made in two parts, in combination with the shoe, interposed spring, and brake-beam, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, on this 9th day of November, 1882, in the presence of two witnesses.

EDMUND R. BRISTOL.

Witnesses:

S. S. STOUT,

H. G. UNDERWOOD.